

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claim 1 (previously presented): An electrode for electric discharge surface treatment comprising a compressed mixture of at least a powder of metal carbide and a powder of metal hydride from which hydrogen is desorbed before performing an electric discharge surface treatment operation.

Claim 2 (previously presented): The electrode for electric discharge surface treatment as defined in claim 1, wherein the metal carbide is titanium carbide and the metal hydride prior to hydrogen desorption is titanium hydride.

Claim 3 (previously presented): The electrode for electric discharge surface treatment as defined in claim 1, wherein the ratio of the powder of the metal carbide to the powder of the metal hydride is set according to desired electrode strength and crumbliness.

Claim 4 (currently amended): A manufacturing method of an electrode for electric discharge surface treatment as claimed in claim 1, comprising mixing at least a powder of metal carbide and a powder of metal hydride; compression molding and desorbing hydrogen in the metal hydride before performing an electric discharge surface treatment operation; and

subsequently performing heat treatment to manufacture the electrode for electric discharge surface treatment.

Claim 5 and 6. (canceled).

Claim 7 (currently amended): An electrode for electric discharge surface treatment as claimed in claim 1, obtained by mixing at least a powder of metal carbide and a powder of metal hydride;

compression molding the mixture and desorbing hydrogen in the metal hydride before performing an electric discharge surface treatment operation; and

subsequently performing heat treatment to manufacture the electrode for electric discharge surface treatment.

Claim 8 and 9. (canceled).

Claim 10 (currently amended): A method for discharge surface treating a work using an electrical discharge machine comprising positioning an electrode as claimed in claim 1, comprising a compressed mixture of at least a powder of metal carbide and a powder of metal hydride from which hydrogen is desorbed before performing an electric discharge surface treatment operation opposite a material to be surface treated; and

forming a coating on the material by causing electrical discharge between the electrode and the material.

Claim 11 and 12. (canceled).

Claim 13 (previously presented): The electrode for electric discharge surface treatment as defined in claim 3, wherein the ratio of the powder of the metal carbide to the powder of the metal hydride is 1:9 to 9:1.

Claim 14-16. (canceled).

Claim 17 (currently amended): A manufacturing method of an electrode for electric discharge surface treatment as claimed in claim 1, comprising steps of;

- mixing at least a powder of metal carbide and a powder of metal hydride;
- performing compression molding of the mixture of the powders to form the electrode;
- and subsequently
- desorbing hydrogen from the hydride so as to manufacture the electrode comprising metal carbide and metal for electric discharge surface treatment.

Claim 18 (previously presented): The manufacturing method of an electrode for electric discharge surface treatment as defined in claim 17, wherein the metal carbide is titanium carbide and metal hydride is titanium hydride.

Claim 19. (previously presented): The manufacturing method of an electrode for electric discharge surface treatment as defined in claim 17, wherein a mixing ratio of the

AMENDMENT and RESPONSE TO RESTRICTION REQUIREMENT Attorney Docket No.: Q63491
U.S. Application No.: 09/787,359

powder of the metal carbide to the powder of the metal hydride is set according to desired electrode strength and crumbliness.

Claim 20. (previously presented): The manufacturing method of an electrode for electric discharge surface treatment as defined in claim 19, wherein the ratio of the powder of the metal carbide to the powder of the metal hydride is 1:9 to 9:1.